



Missions and Means Framework

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**Presented to
Dr. William Perry
January 6, 2004**

Agenda

- 
- **Introductions**
 - **Purpose**
 - **Mission & Means Framework**
 - **Transformation**
 - **Discussion**

Agenda

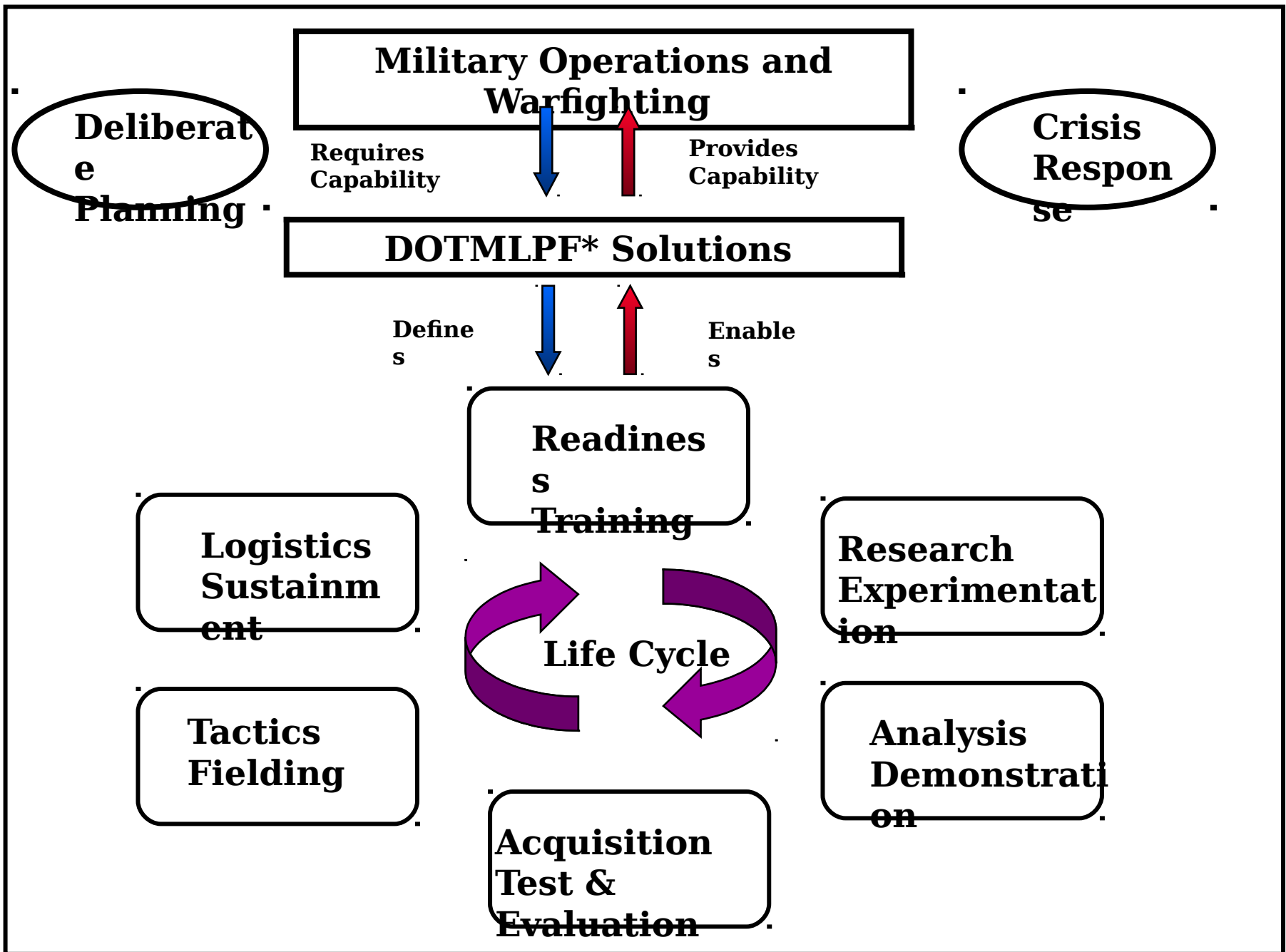
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Purpose

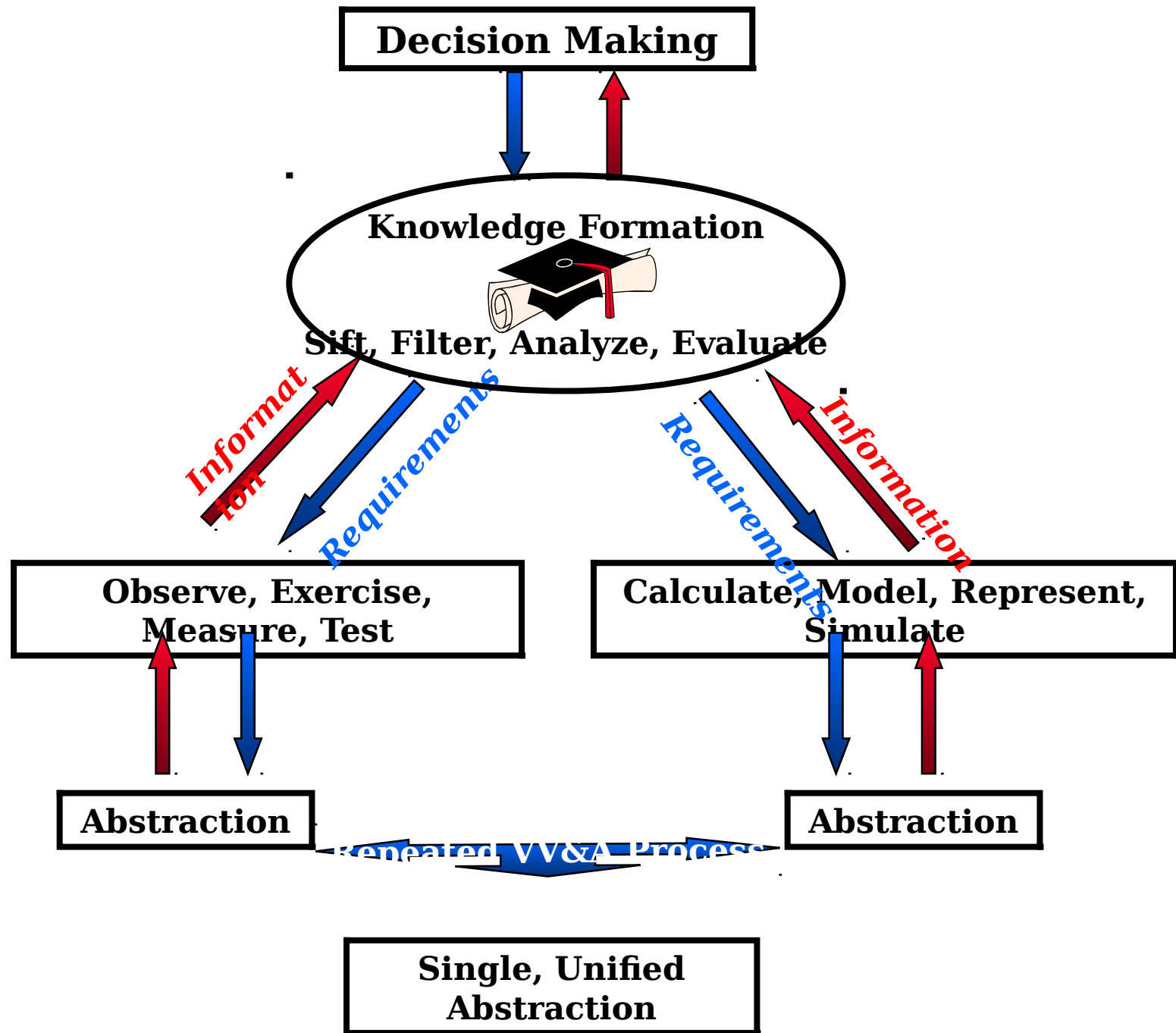
- **The Missions and Means Framework is an integrated procedure to inform the decision making required to conceive and implement transformation.**
- **Our purpose is to obtain your evaluation and feedback on the methodology. And, if you determine there is sufficient merit, enlist your advice and advocacy for fielding across DoD.**

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* DOTMLPF: Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities



To Make It Work ...Need Five Things

- 1. Composable Framework and supporting Procedures**
- 2. Critical Mass of End-User Content and supporting Access**
- 3. Business Model for Life-Cycle Sustainment and supporting Program Elements**
- 4. Tools, Utilities and supporting Standards**
- 5. Education, Training, and Certification**

Missions and Means

11 Fundamental Elements

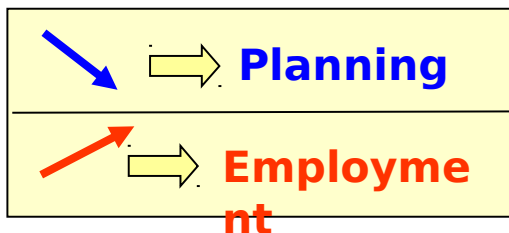
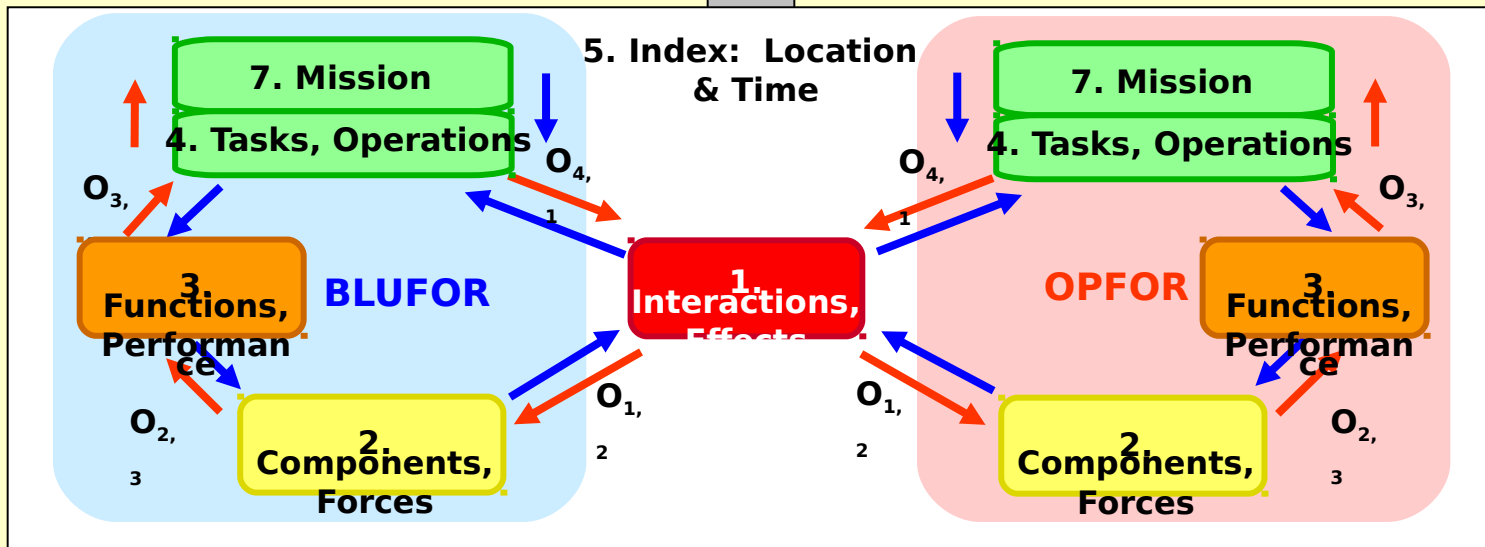
Seven Levels, Four Operators

Framework

6. Context, Environment (Military, Civil, Physical, etc.)

7. OWNFOR Why = Purpose, Mission

7. OPFOR Why = Purpose, Mission



Missions and Means

11 Fundamental Elements

Seven Levels, Four Operators

Framework

7. OWNFOR Why = Purpose, Mission

7. OPFOR Why = Purpose, Mission

**7. Why, Wherefore, to
What End**

Missions and Means

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6. Under What Circumstances

Missions and Means

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**5. Index: Location
& Time**

5. When and Where

Missions and Means

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7. Mission
4. Tasks, Operations

OWNFOR

5. Index: Location
& Time

7. Mission
4. Tasks, Operations

OPFOR

4. Activity-centric, named with a Verb “Do What” -- the Playbook

Missions and Means

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4. Tasks, Operations

BLUFOR

Components,
Forces

5. Index: Location
& Time

7. Mission
4. Tasks, Operations

OPFOR

Components,
Forces

2. Entity-centric, named with a Noun “By Whom”
-- the Players

Missions and Means

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7. Mission
4. Tasks, Operations

3. Functions, Performance
OWNFOR

2. Components, Forces

5. Index: Location & Time

1. Interactions, Effects

7. Mission
4. Tasks, Operations

OPFOR
3. Functions, Performance

2. Components, Forces

1. The Slings-and-Arrows of Outrageous Fortune -- Science
3. Condition-dependent "How Well" -- Engineering

Missions and Means

11 Fundamental Elements

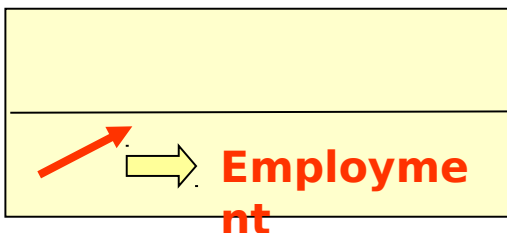
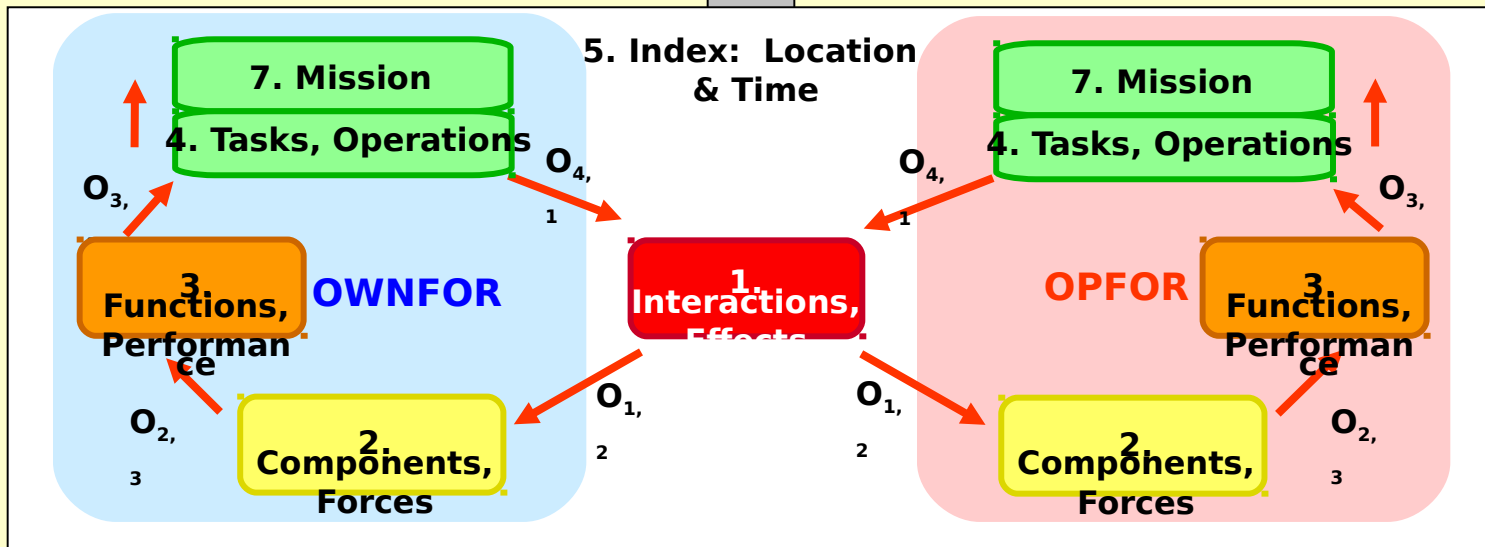
Seven Levels, Four Operators

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Bottom-up, Casual, Time-forward execution and adjudication of outcomes

Missions and Means

11 Fundamental Elements

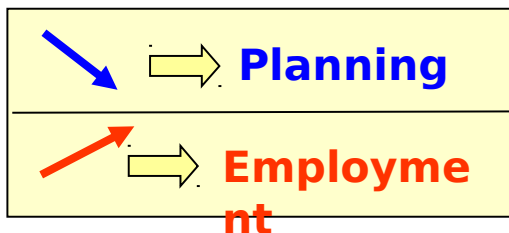
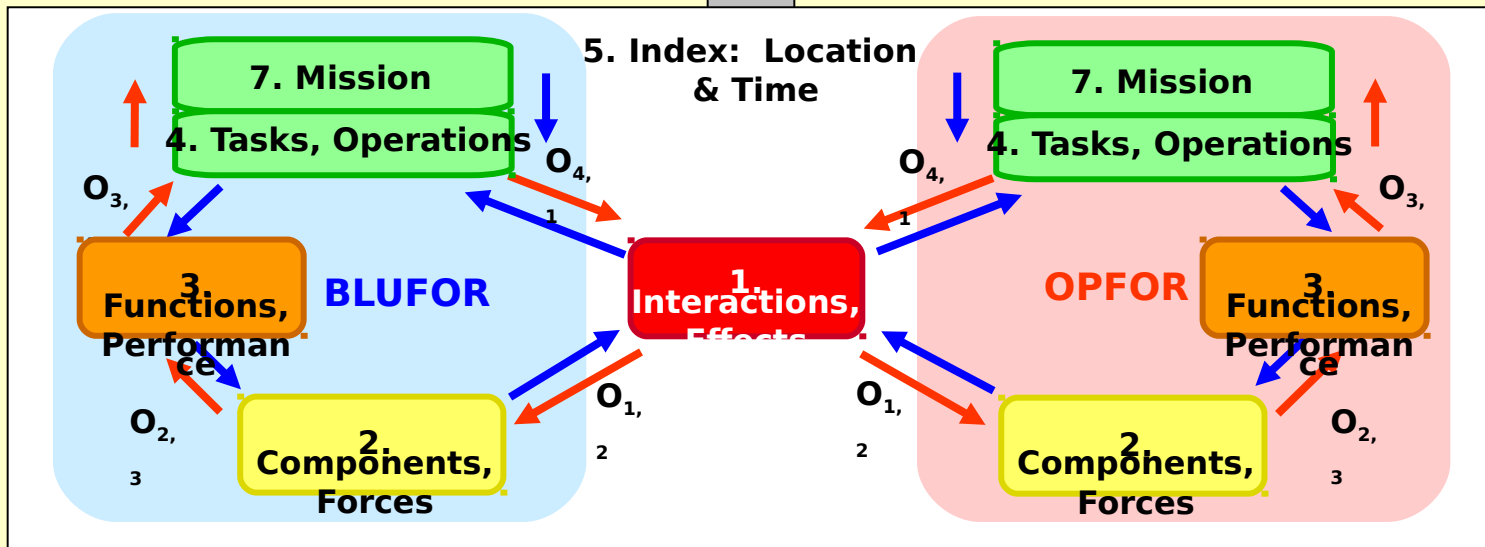
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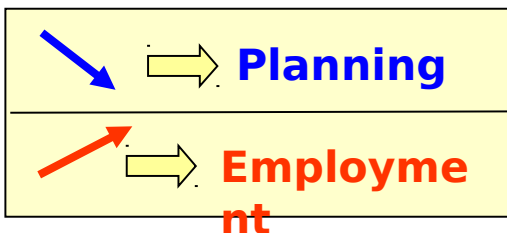
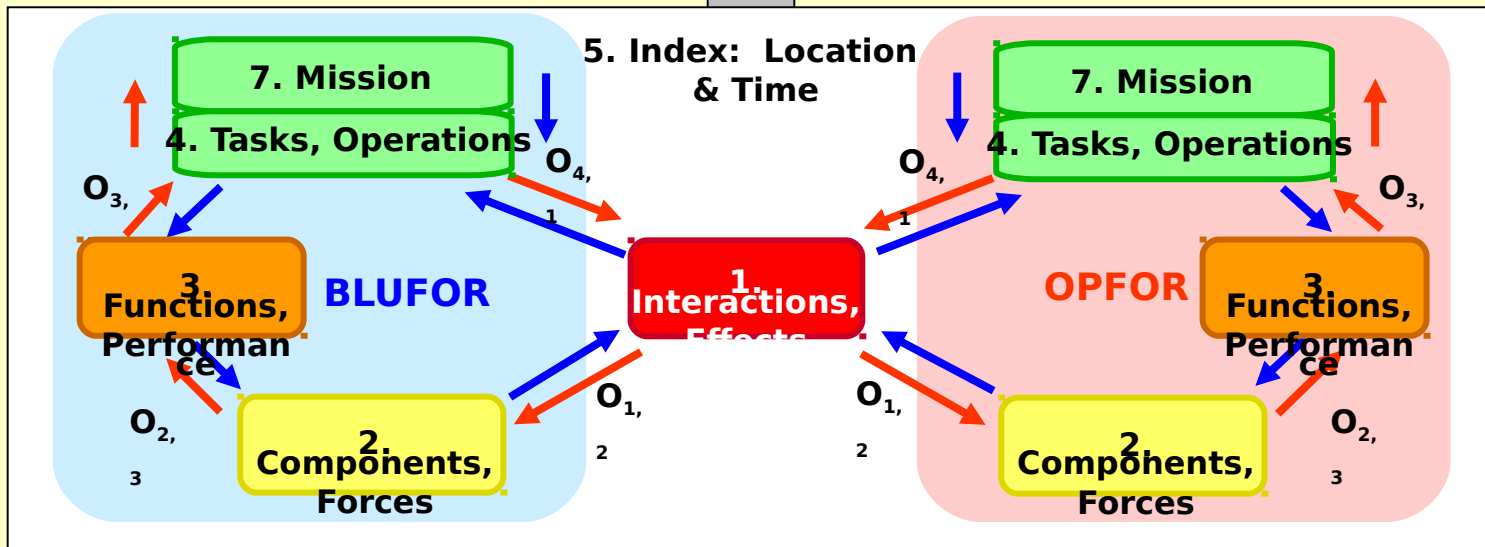
**Top-Down, Concurrent
Synthesis and Decision
Making**

Missions and Means Framework

6. Context, Environment (Military, Civil, Physical, etc.)

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Architecture defines how Parts are assembled into Packages

MMF Application - Situation

| | |
|-------------------|---|
| Road to War | <ul style="list-style-type: none">• Radical elements form new government, seek to force recognition by UN as legitimate government.• Legitimate, pro-Western Government of Orangeland is overthrown by radical elements and forced into exile.• Majority of Orangeland's conventional military forces are loyal to new government. Orangeland invades neighboring country of Blueland.• United States and its coalition partners believe national interests and regional stability are threatened. They take military action to drive Orangeland forces from Blueland; remove rebel government from power; restore legitimate, pro-Western government; stabilize region; and protect U.S. and coalition vital interests. |
| Current Situation | <ul style="list-style-type: none">• Coalition forces have commenced offensive ground operations in the region to drive Orangeland forces out of Blueland and continue attacking to isolate rebel government leadership inside capital of Orangeland. |
| Mission | <ul style="list-style-type: none">• CJFLCC intends to isolate rebel government leadership in the capital by defeating majority of conventional forces well outside the capital and preventing them from reinforcing security forces protecting the rebel leadership inside the capital. |

MMF Layered View:

ST

(ST) 4 Establish military and civil conditions to legitimate government

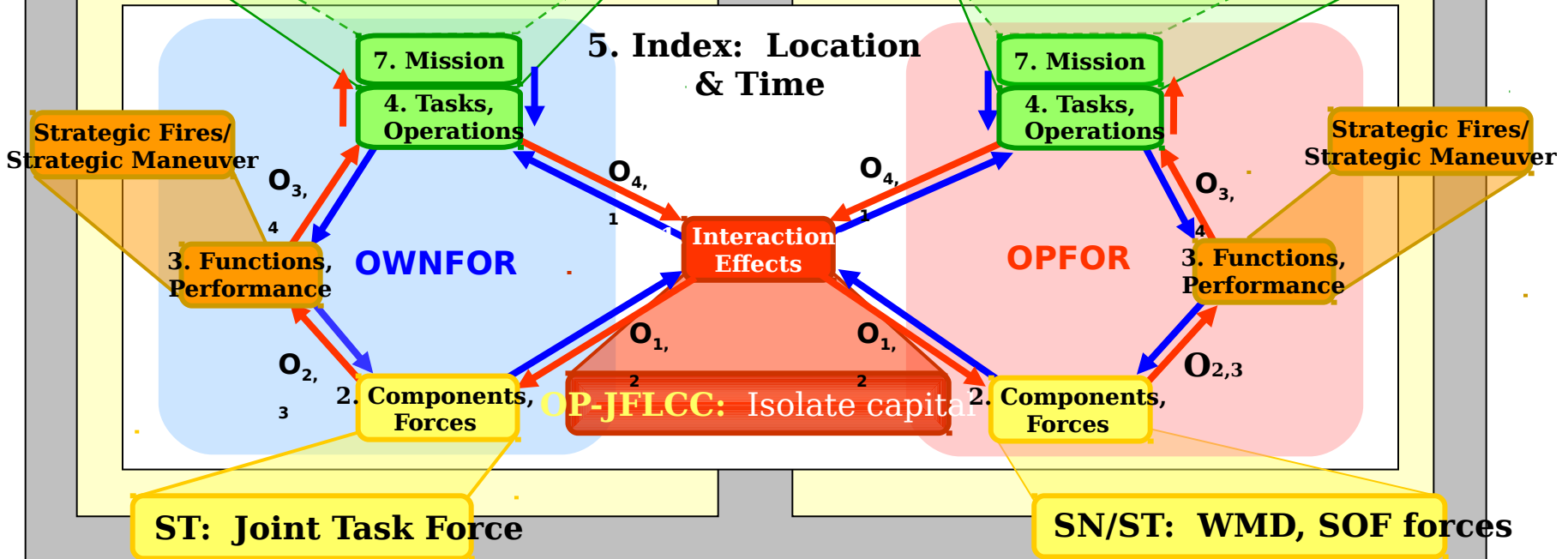
(ST) 4 Establish military, civil and political conditions to 7 Deter use of force

(ST) ST 1.3.6 Conduct operations in depth (Physical, Environmental, Information, etc.)

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7. OWNFOR Why = Purpose, Mission

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Blue arrow: Synthe
Red arrow: Employ
Black arrow: Interaction

MMF Layered View:

SN

(SN) 4 Restore legitimate government in order to protect national interests

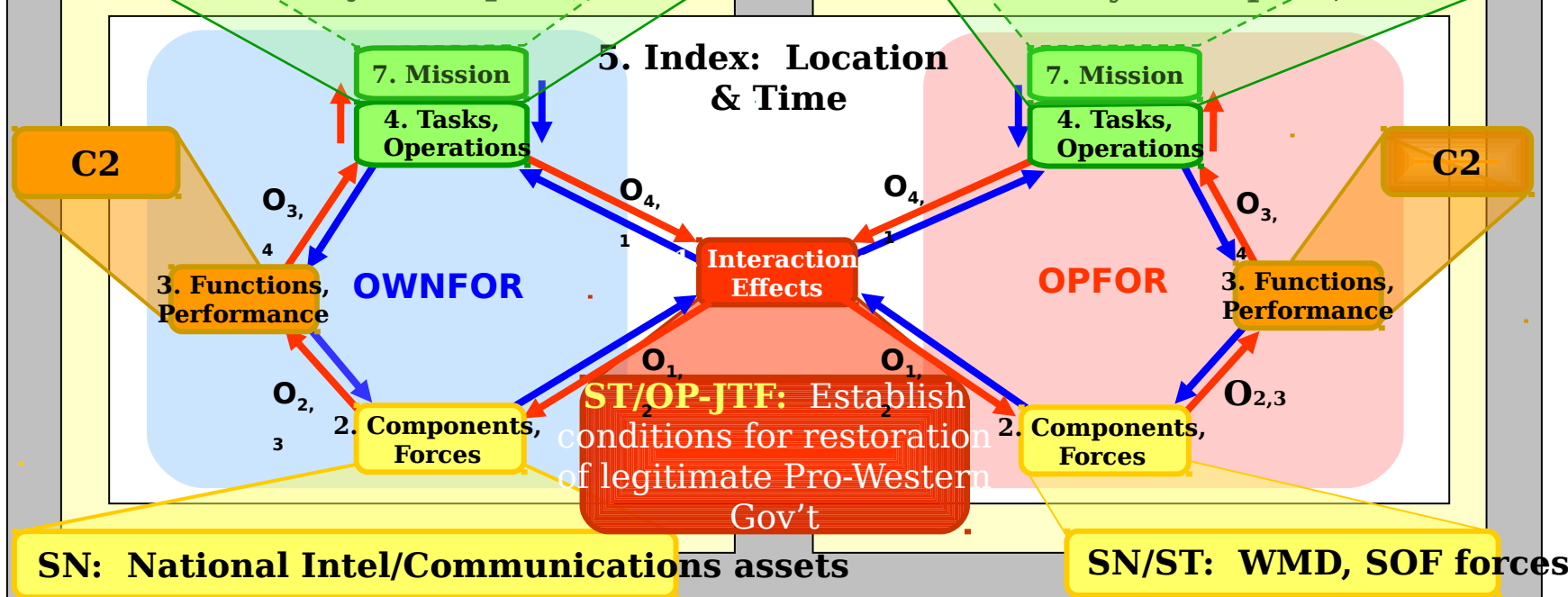
(SN) 4 Determine use of force in order to ensure of regime

(SN) SN 3 Employ forces, SN 5.2.4 Decide on need for military action

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Synthe
Employment

MMF Layered View:

OP

(OP) 4 Isolate rebel government to 7 Help establish desired conditions

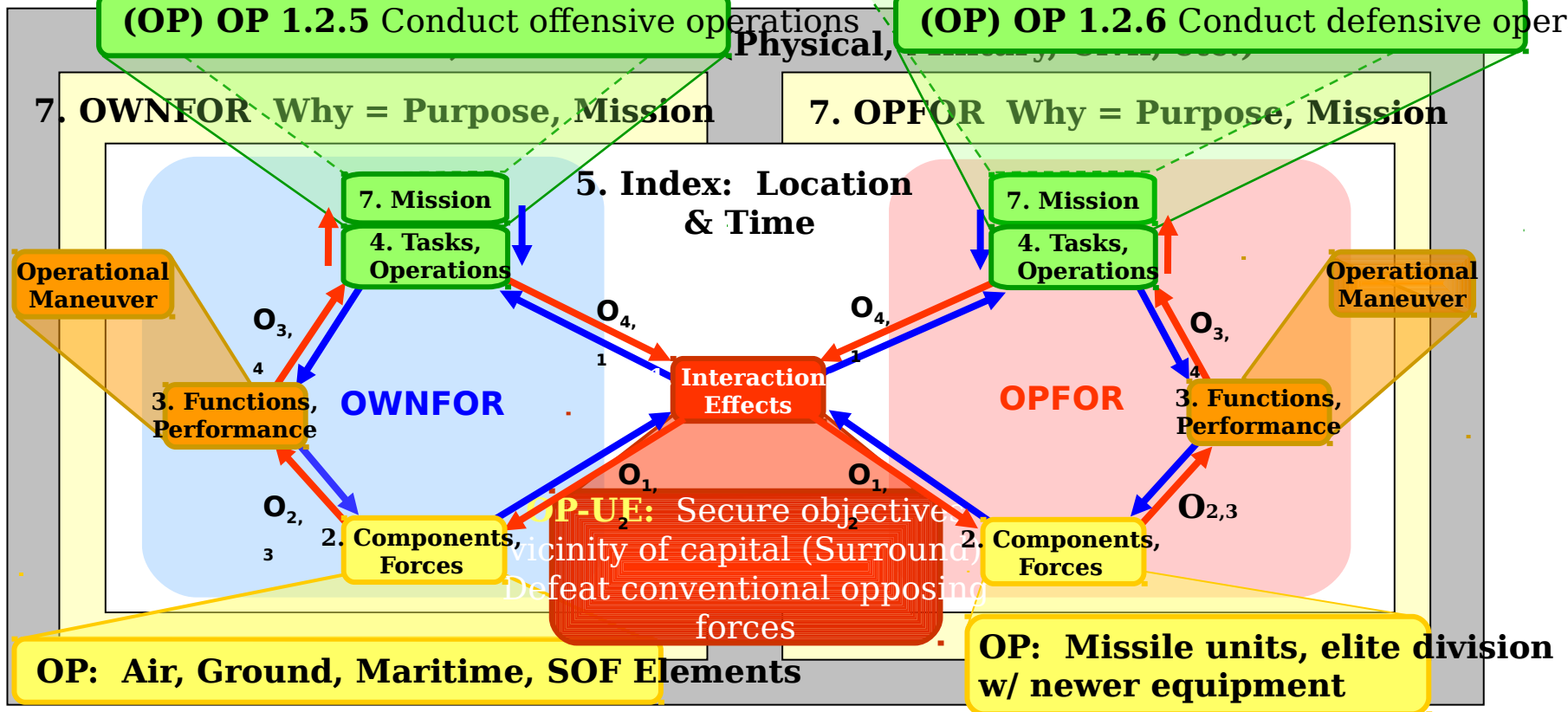
(OP) 4 Conduct synchronous ops to 7 Help establish desired conditions

(OP) OP 1.2.5 Conduct offensive operations

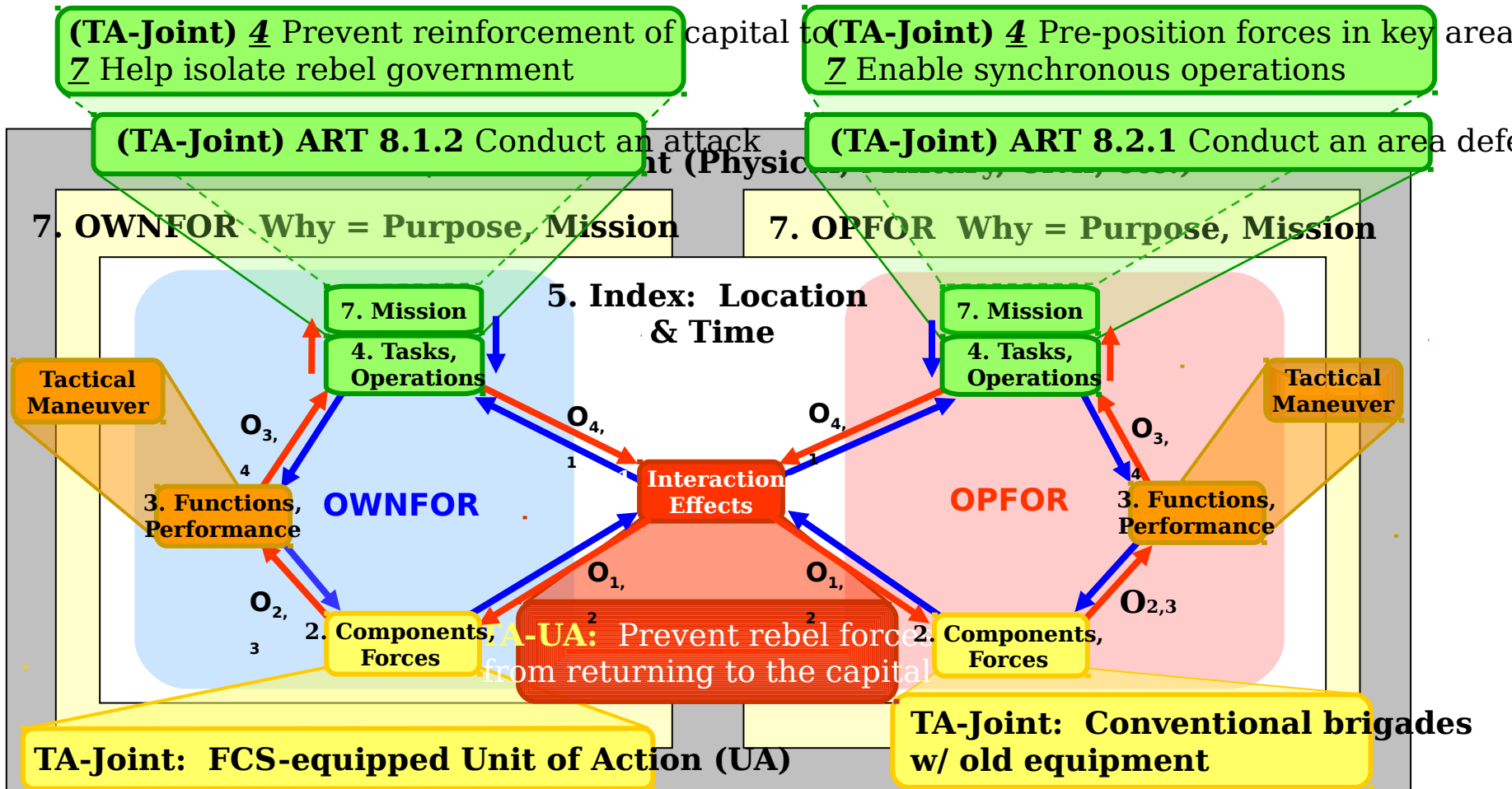
(OP) OP 1.2.6 Conduct defensive operations

7. OWNFOR Why = Purpose, Mission

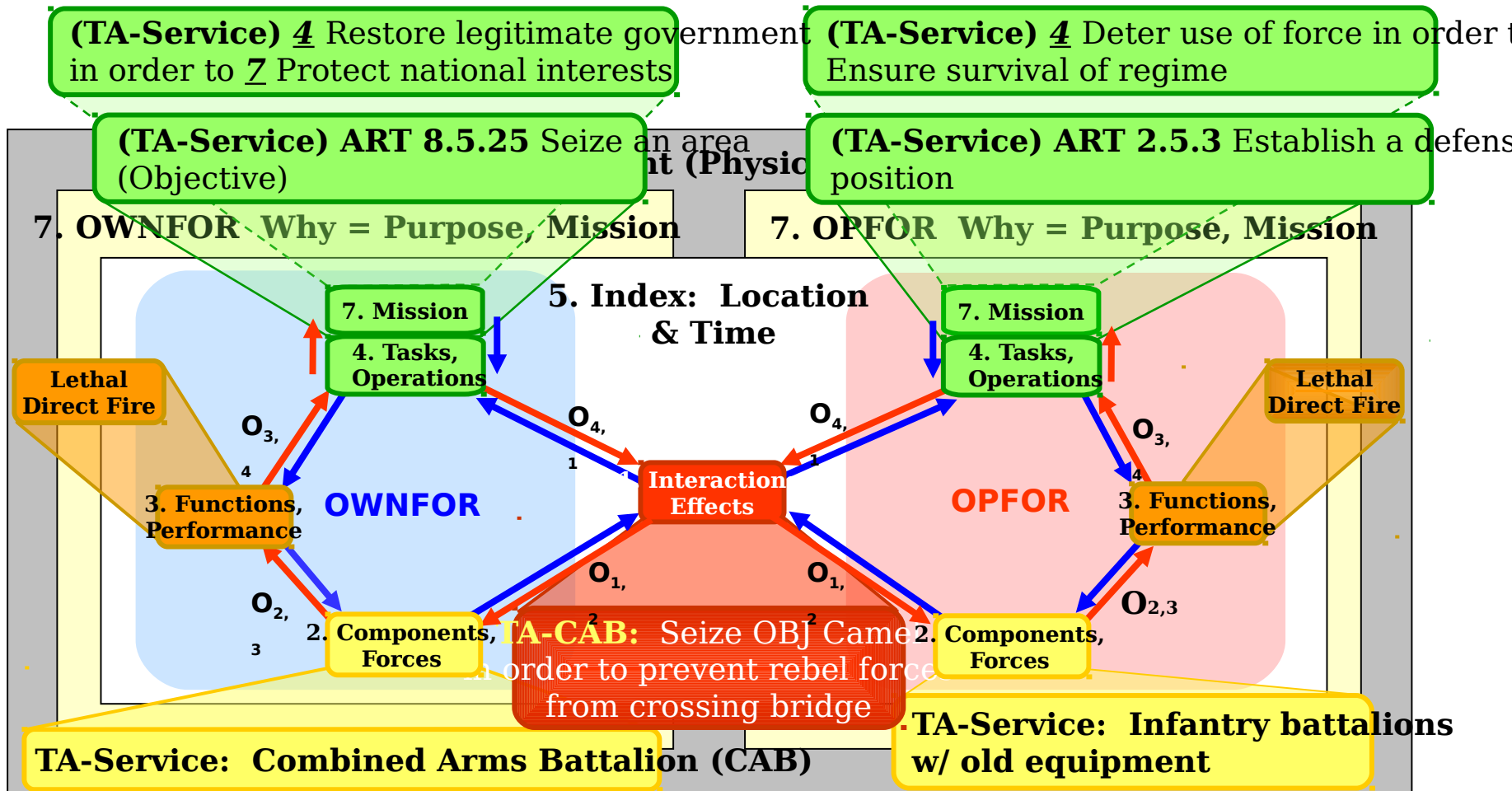
7. OPFOR Why = Purpose, Mission



MMF Layered View: TA-Joint



MMF Layered View: TA-Service



MMF Application - Key Tasks

JTF

1. Restore legitimate government
2. Achieve air superiority
3. Destroy WMD capability
4. Facilitate control of energy centers

Operational
to Tactical:
Nested Tasks

JFLCC

1. Secure capital region in Orangeland
2. Secure key oil and gas pipelines and prod facilities
3. Defeat rebel forces

UE

1. Attack to defeat rebel forces in zone
2. Conduct vertical maneuver to disrupt rebel forces
3. Secure key facilities

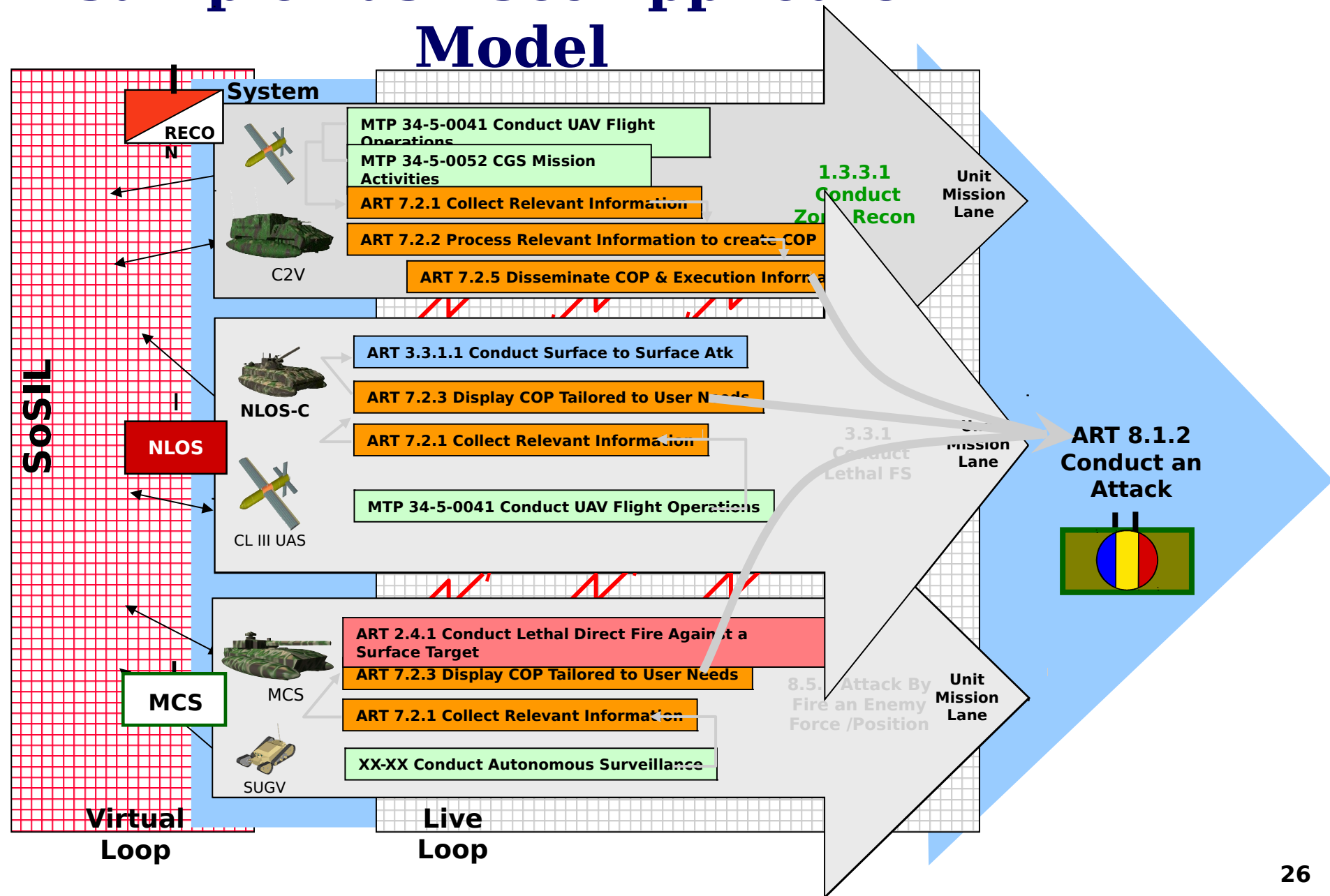
UA1

1. Secure key terrain vic OBJ CAMEL
2. Block enemy reinforcements from reaching capital

CAB2

1. Secure OBJ CAMEL in order to facilitate UA2 attack on OBJ BAT
2. Attack to defeat rebel forces attempting to return to capital

Sample Task Set Applied OT Model



Relating Effects to Utility

Desired Conditions

Strategic MoEs:

- Legitimate government restored to power
- Territorial security of Orangeland ensured

Operational MoEs:

- Enemy conventional capabilities defeated
- Leadership in capital isolated

Tactical MoEs:

- Security forces inside capital defeated
- Capital surrounded

Attack Results:

- Conventional military forces blocked from reentering capital

Not Desired Conditions

Strategic MoEs:

- Rebel government maintains claim to power from an undisclosed location
- Rebel leaders play up “unprovoked” West attack and gain support for their government through

Operational MoEs:

- Capital Defense Corps security forces are able to secure rebel leaders and get them out of the capital

Tactical MoEs:

- Conventional forces delay coalition forces from taking key objectives inside the capital and engaging Second Army

- Conventional forces successfully reenter capital before main effort can reach its objective

Successful

Unsuccessful

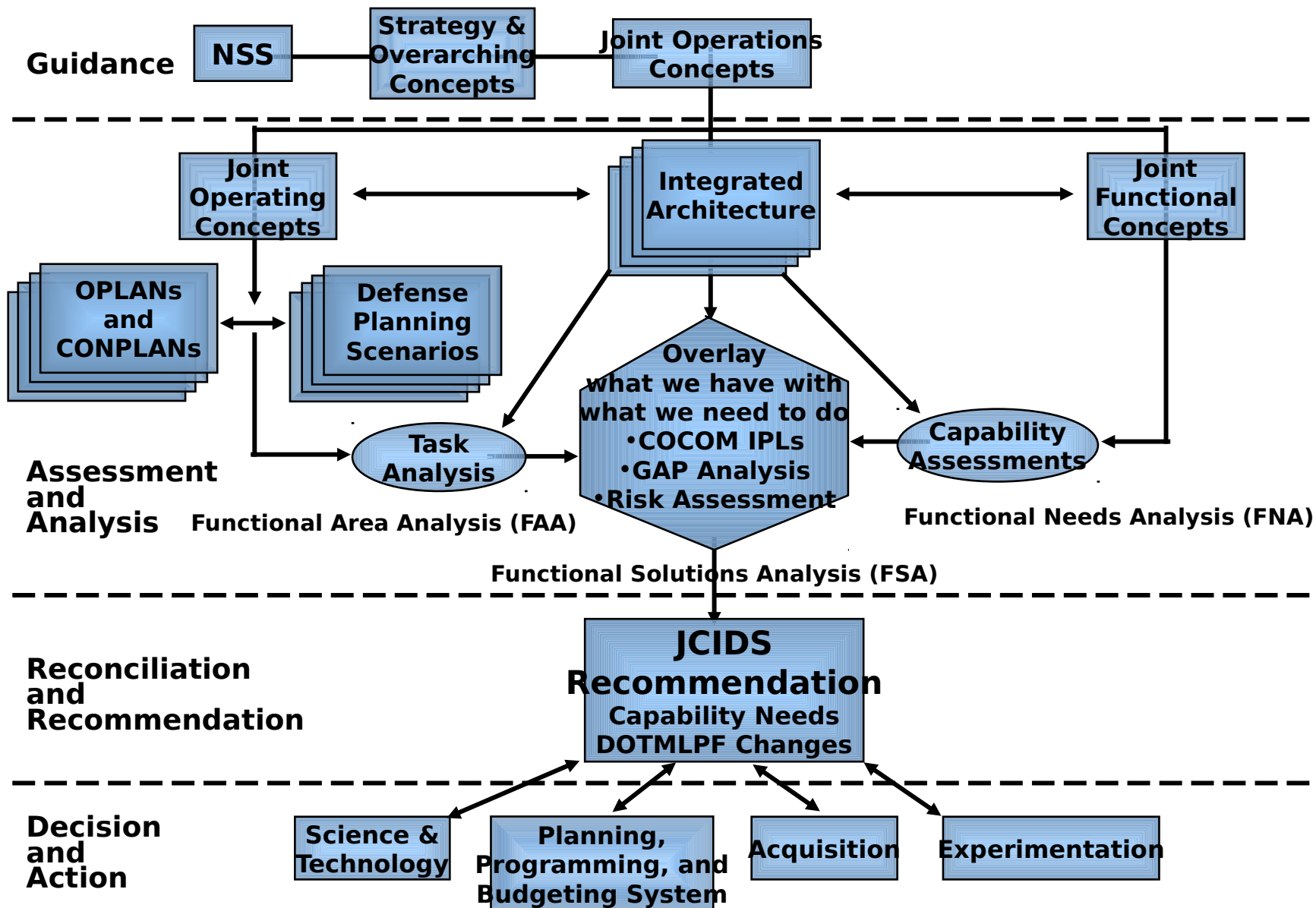
CAB2 Attack

Starting Conditions

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CJCSI 3170 (JCIDS)



Warfighter **Visualizes** the operation and capabilities required to accomplish mission.

Mission Received

MMF enables warfighter to **Describe** vision using framework to ID key elements and tools to capture elements in data form.

Analyst/Engineer

Warfighter/Rep.

MMF prompts capture of the elements below:

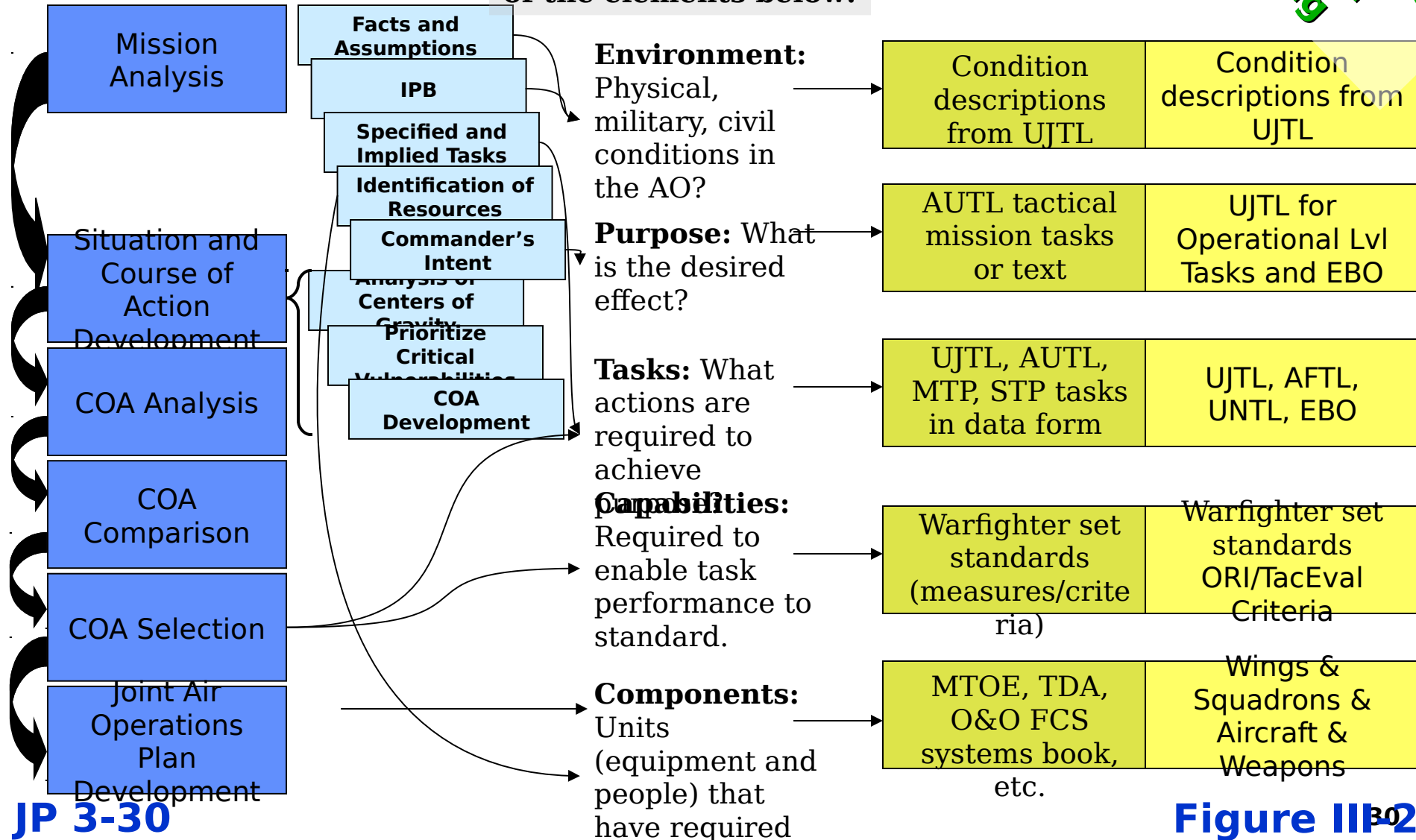


Figure II-30

Warfighter **Visualizes** the operation and capabilities required to accomplish mission.

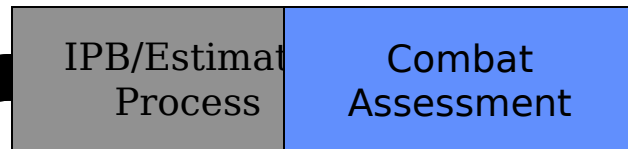
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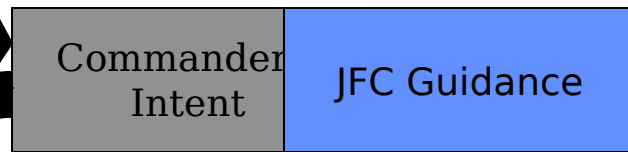
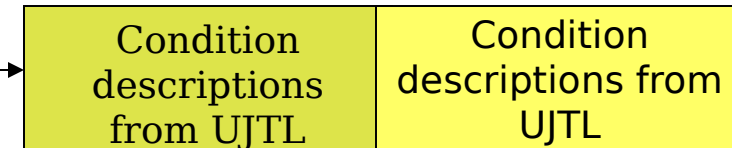
Warfighter/Rep.

Analyst/Engineer

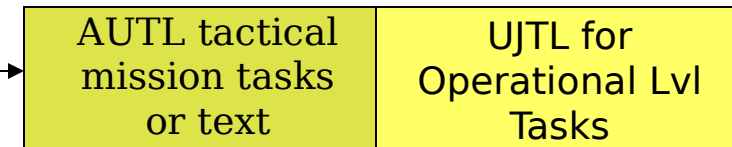


Environment:

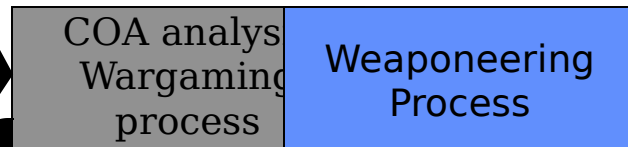
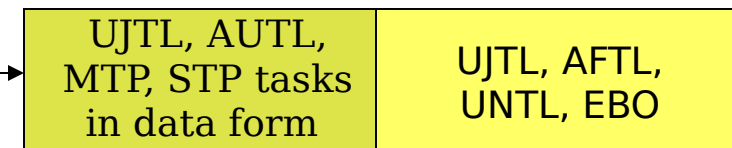
Physical, military, civil conditions in the AO?



Purpose: What is the desired effect?

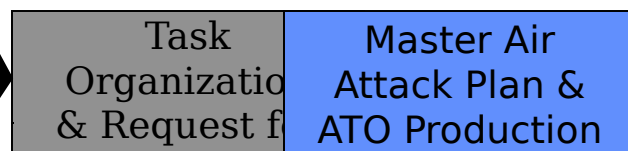
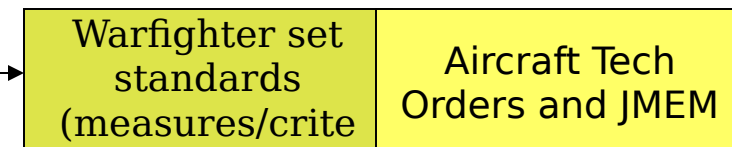


Tasks: What actions are required to achieve



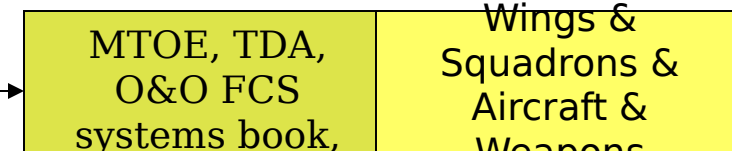
Capabilities:

Required to enable task performance to standard.

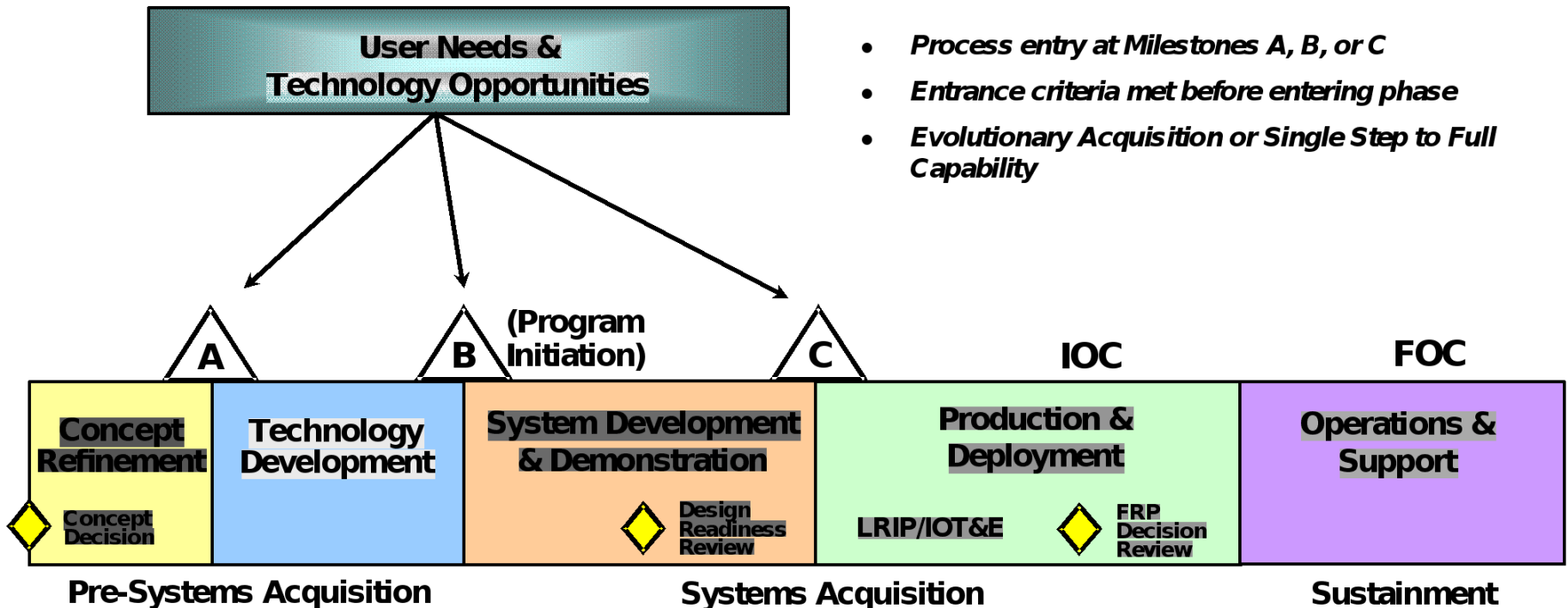


Components:

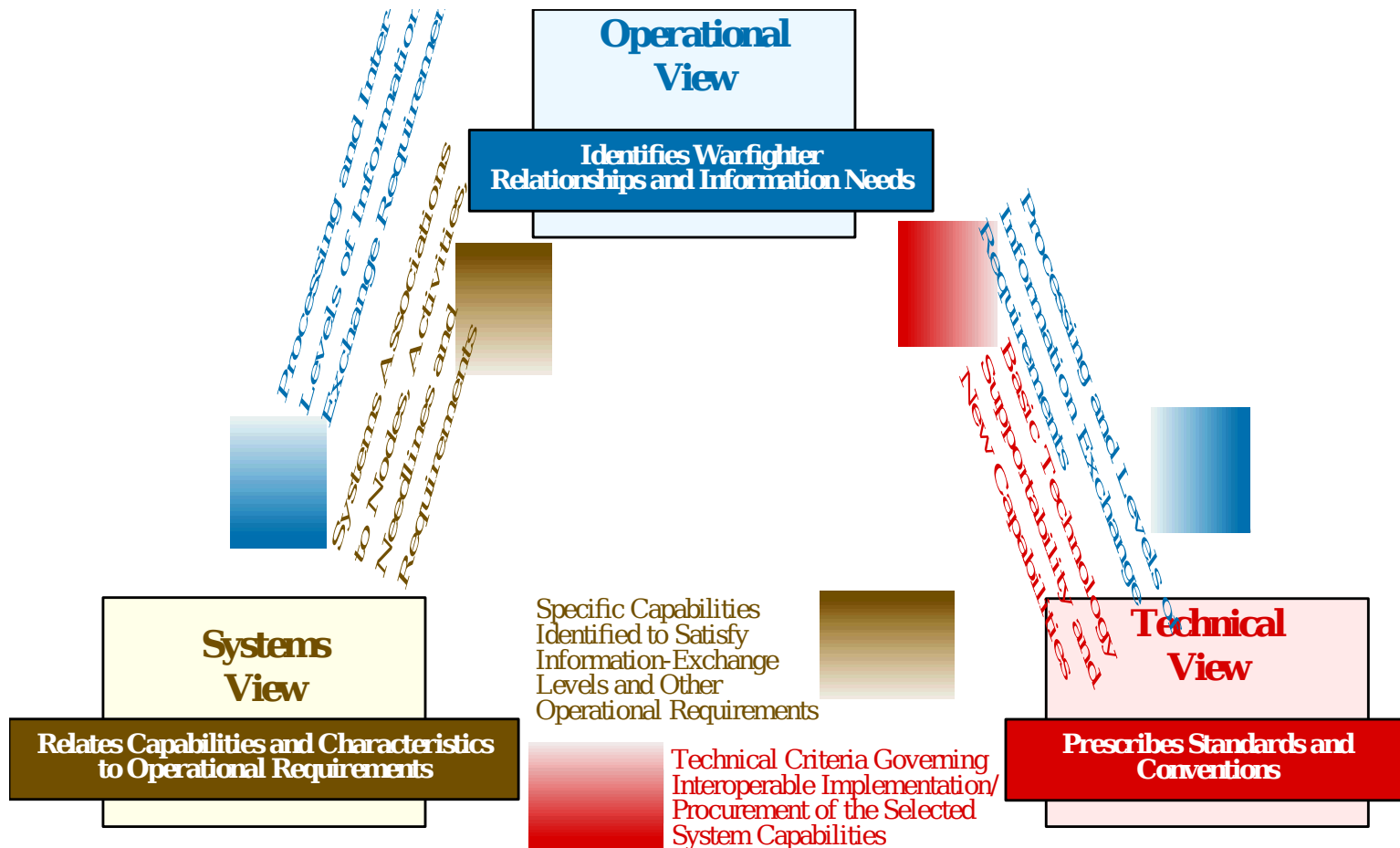
Units (equipment and people) that have required



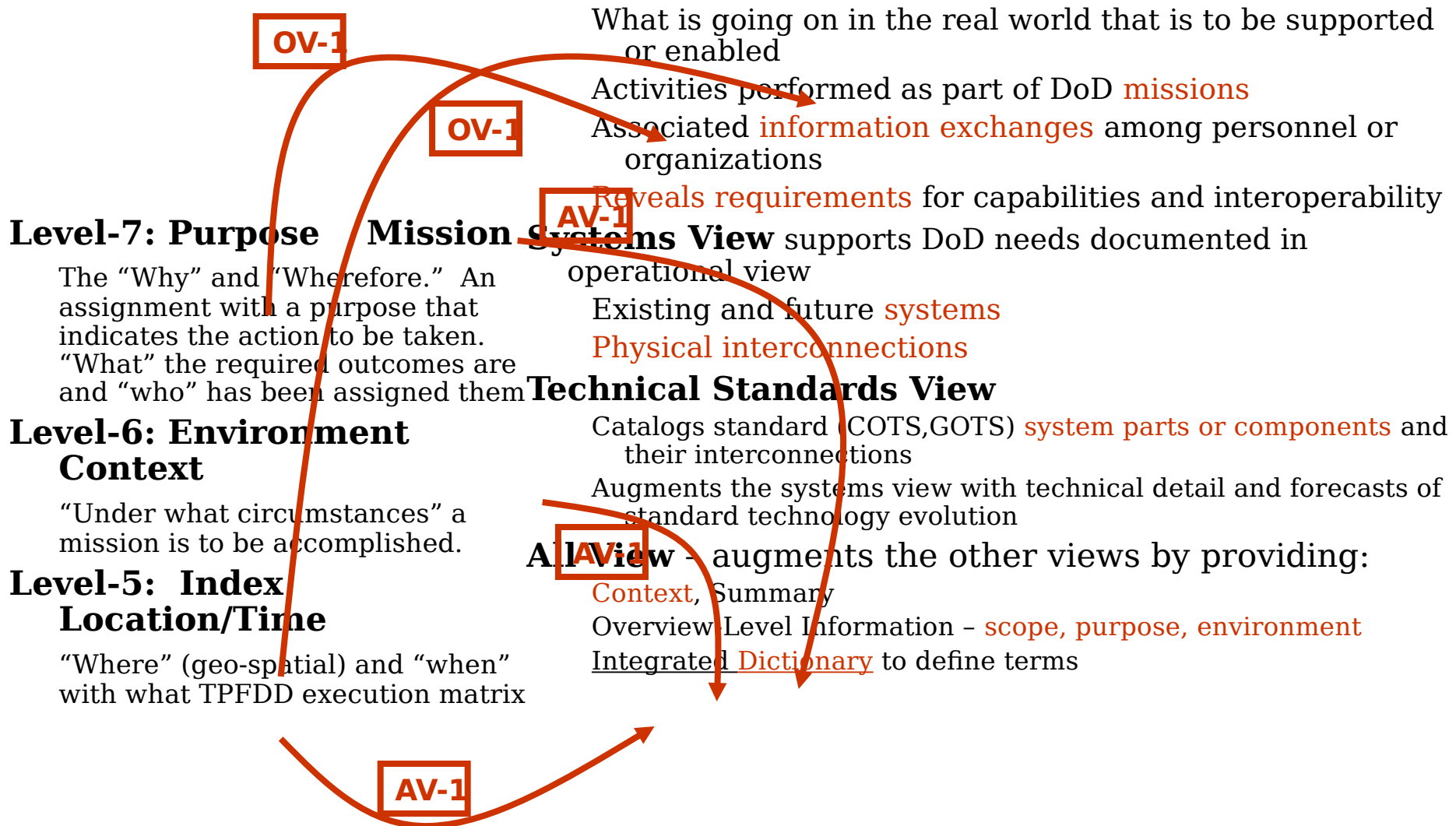
DoD 5000.2



DoD Architecture Framework



Mapping MMF to DoDAF Products



Mapping MMF to DoDAF Products



Mapping MMF to DoDAF Products

Operational View

What is going on in the operational view that is to be supported or enabled

Activities performed as part of the missions

Associated information exchange among personnel or organizations

Reveals requirements for capabilities and interoperability

Systems View supports DoD needs documented in

operational view

Existing and future systems

Physical interconnections

Physical Standards View

Catalogs standard (COTS, GOTS) system parts or components and their interconnections

Augments the systems view with technical detail and forecasts of standard technology evolution

All View - augments the other views by providing:

Context, Summary

Overview-Level Information - scope, purpose, environment

Integrated Dictionary to define terms

Level-7: Purpose Mission

The "Why" and "Wherefore." An assignment with a purpose that indicates the action to be taken. "What" the required outcomes are and "who" has been assigned them

Level-6: Environment Context

"Under what circumstances" a mission is to be accomplished.

Level-5: Index Location/Time

"Where" (geo-spatial) and "when" with what TPFDD execution matrix

SV-1
SV-2
SV-3
SV-4

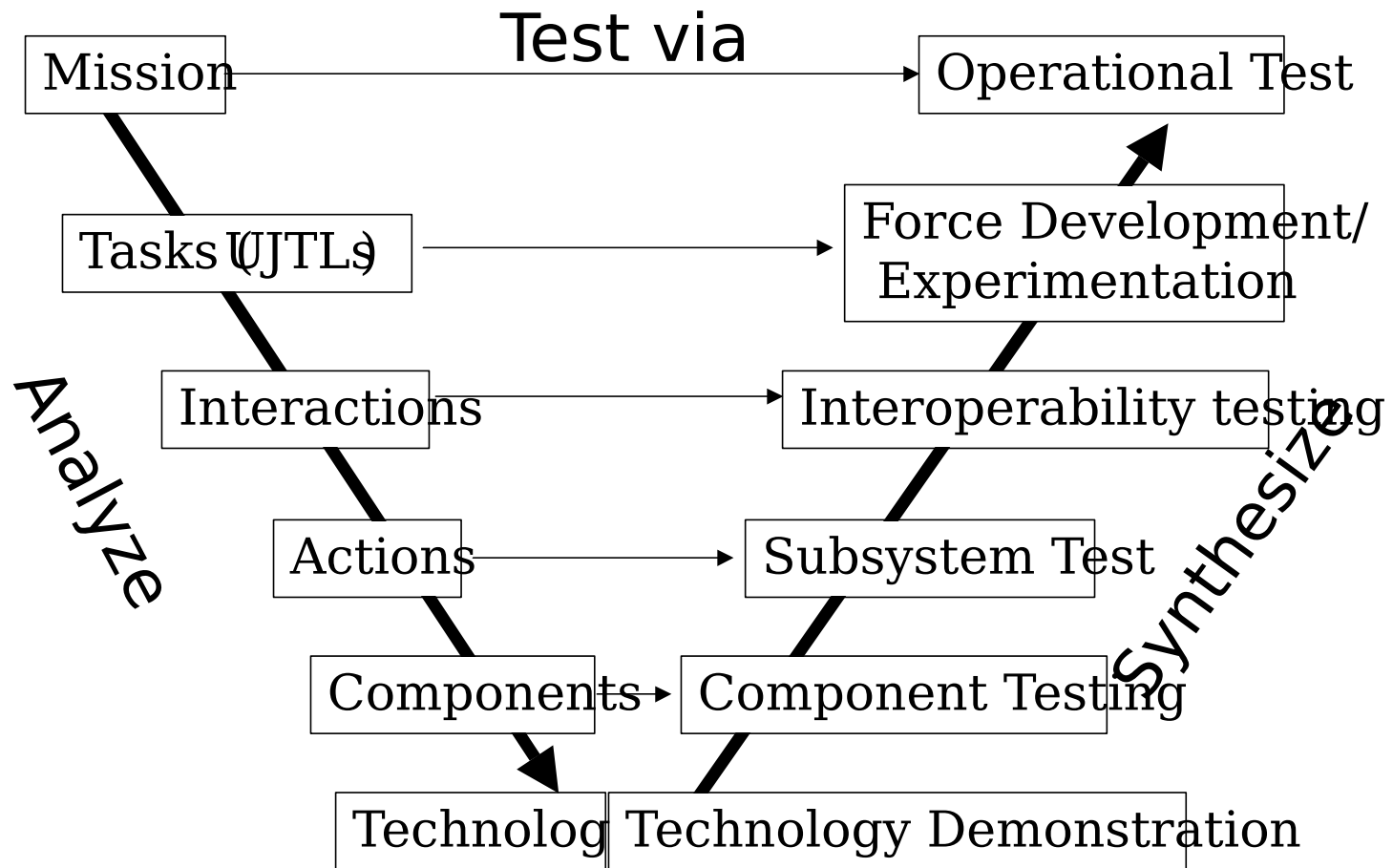
SV-5
SV-6
SV-7
SV-8
SV-9

SV-11

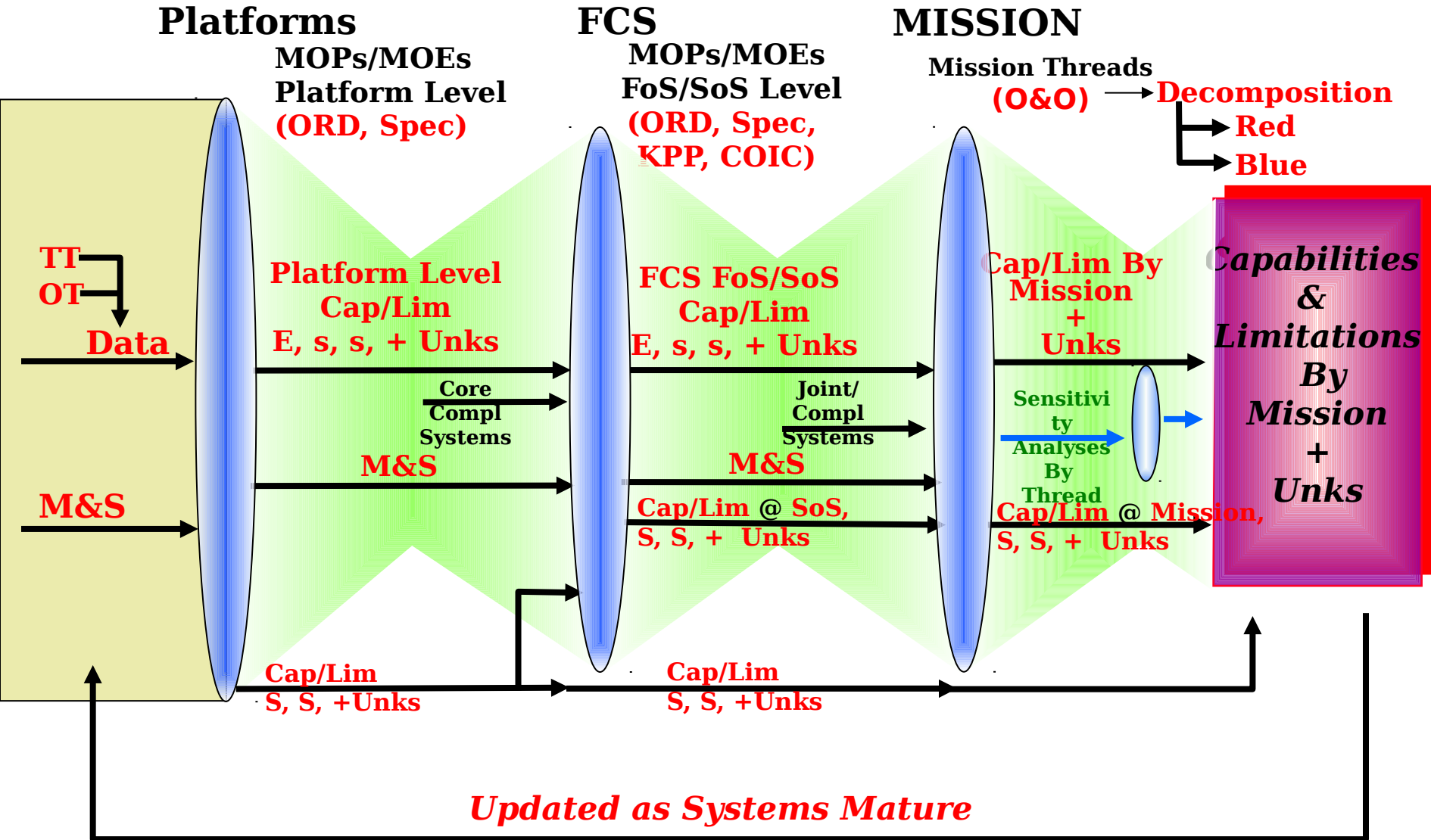
SV-10
SV-10
SV-10

TV-1
TV-2

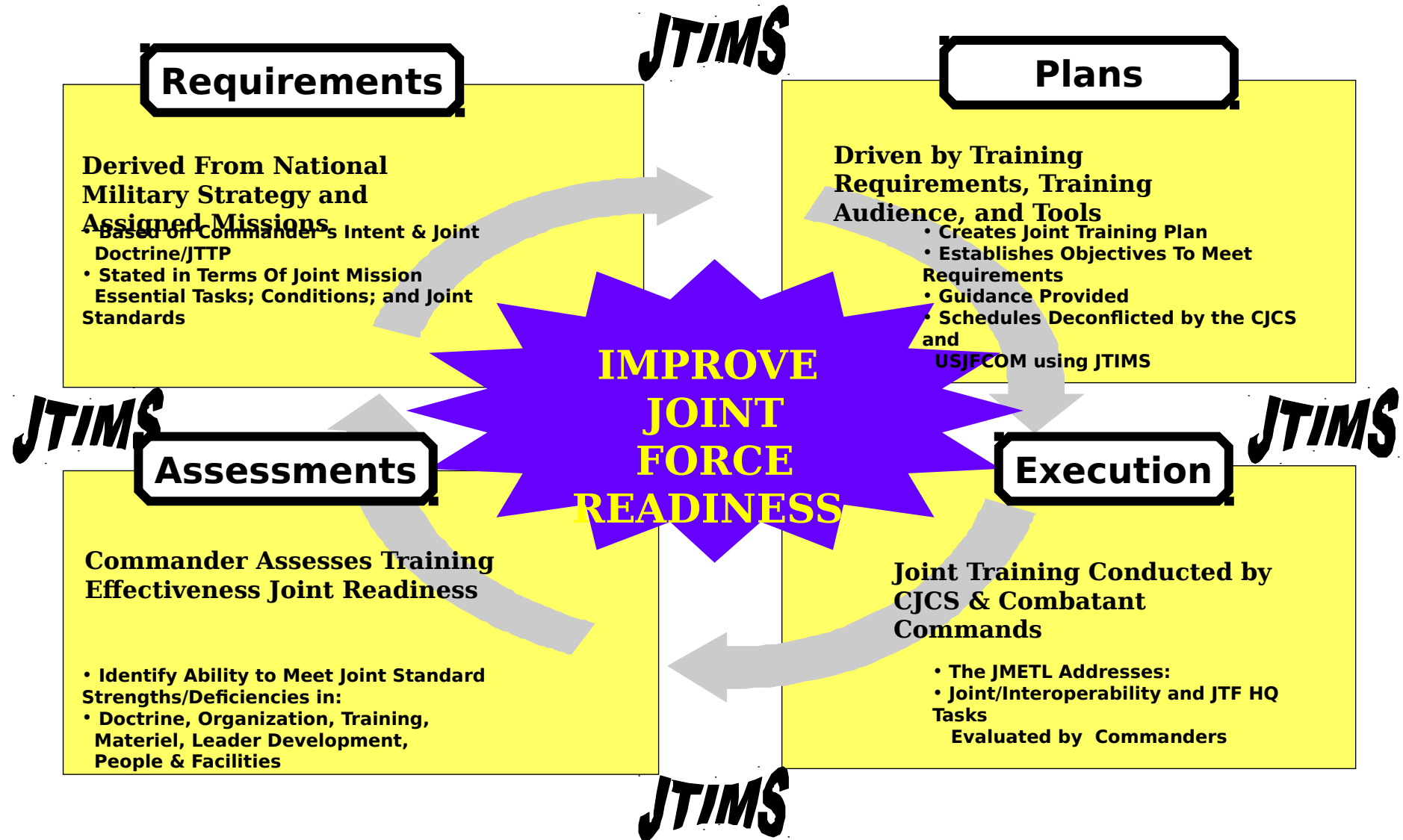
OT&E V-Diagram



FCS Evaluation Strategy



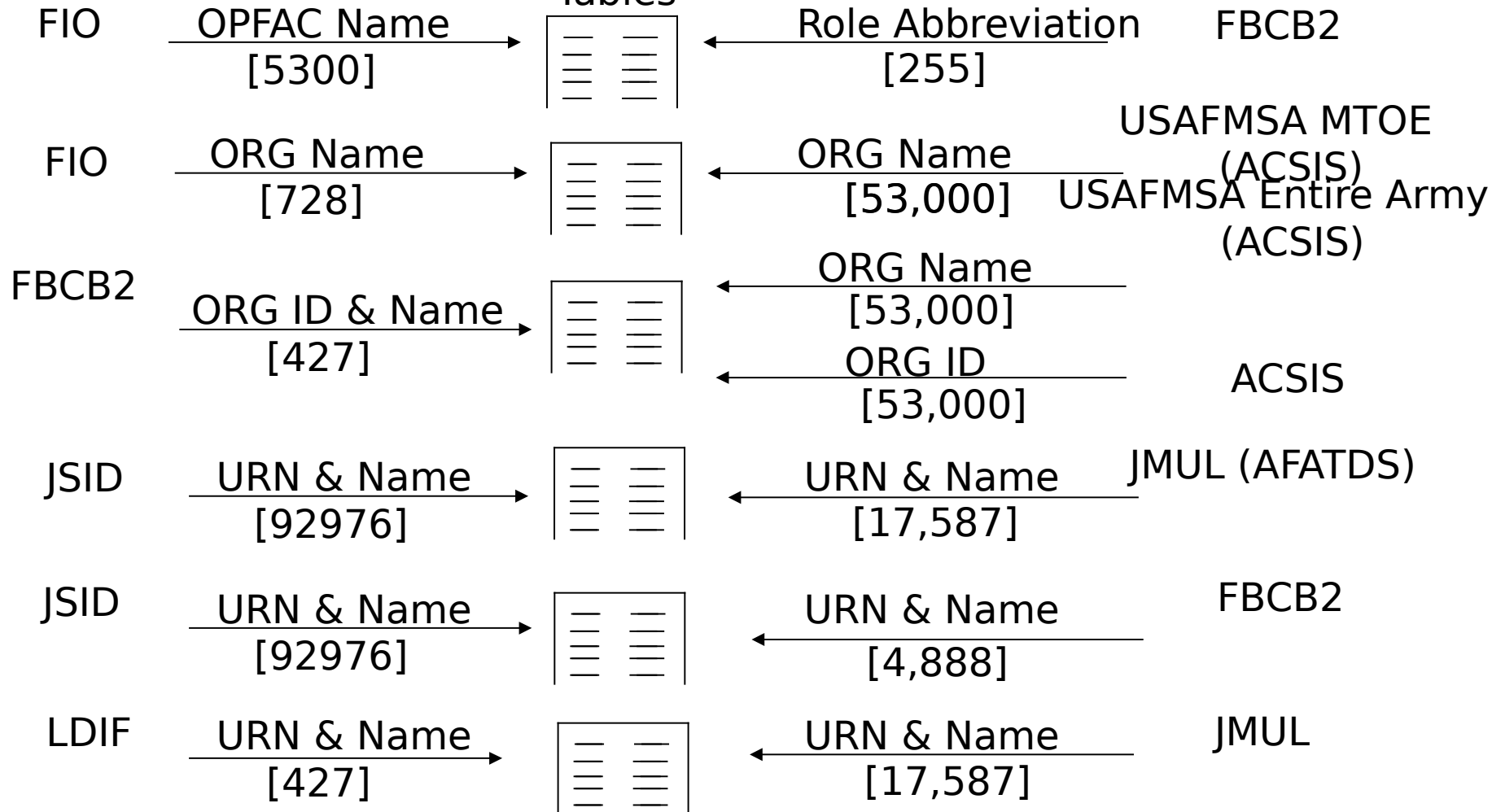
Joint Training System



Application 2: Interoperability

Examples (1st CAV)

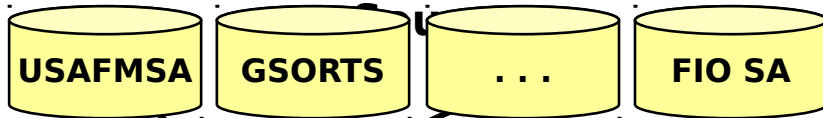
Mapping
Tables



Notes: ■ Not a do once use many
■ Eliminate

ACSIS Architecture

Authoritative Data



AADS-UP

ACSIS Tool

BUILD MISSION-SPECIFIC UTO
GENERATE NETWORK DATA

Partial
StartEx
Files

ACSIS DB
ASSIGN ORG_IDS
AND URNs

SELECT/
EXTRACT

ACSIS
DIF
(XML)

LOAD

EXPORT CBS/RTM

EXPORT FIRESIM

EXPORT JANUS

EXPORT EADSIM

EXPORT JCATS

EXPORT OneSAF

EXPORT C2R/LDIF

EXPORT FBCB2/TIMS

EXPORT JCDB

CBS/RTM Extract

FIRESIM Extract

JANUS Extract

EADSIM Extract

JCATS Extract

OneSAF Extract

C2R/LDIF Extract

FBCB2/TIMS Extract

JCDB Extract

Scenario
Generation
Tools

Complete
StartEx
Files

Add/Modify

Add/Modify

Add/Modify

Add/Modify

Add/Modify

Add/Modify

CBS/RTM StartEx

FIRESIM StartEx

JANUS StartEx

EADSIM StartEx

JCATS StartEx

OneSAF StartEx

C2R/LDIF

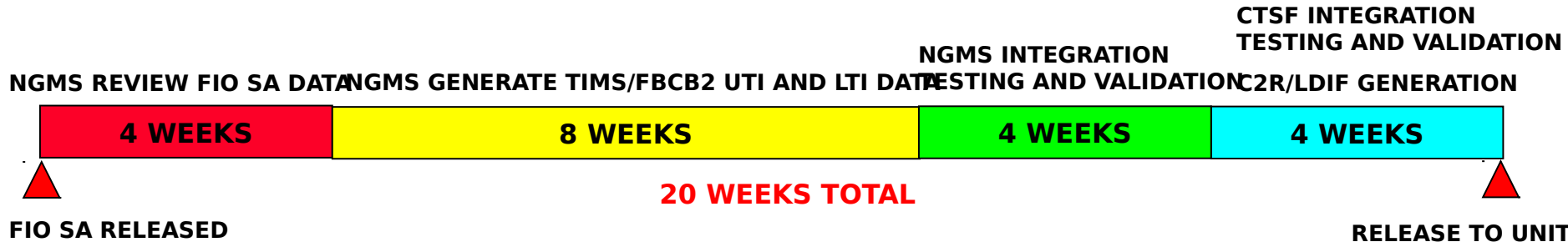
FBCB2/TIMS

JCDB

Additional
StartEx Data

Improved Integration and Interoperability between C4I and Simulations

Current data product generation process without ACSIS or FBCB2/TOC Planner:



Process with ACSIS Phase I, TIMS/AC SIS interface, and FBCB2 manual process:



PM FBCB2 and TIMS early involvement with FIO, G-6, USAFMSA, and the unit at the SA Material Review Board (MRB). Shifts weeks of review/fixes to before the SA release.

Process with ACSIS Phase II and FBCB2/TOC Planner Integration:



- Process improvement- reduce time and cost.
- Improved coordination and synchronization.
- Data harmonization in a single-source authoritative database.
- Improved feedback to authoritative data sources.
- Automation to enforce rules and data integrity- quality data products.
- Less re-work time and cost.
- More responsive to ad-hoc changes.

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***** Opinion**

- **In the post-9/11 World:**
 - **The United States needs the capability to**
 - **Counter new, emerging concepts and threats while**
 - **Retaining the overmatch to deter existing, conventional capabilities.**
 - **Relative to extant U.S. warfighting capabilities, this requires:**
 - **Strategic agility in hours/days, not weeks/months;**
 - **Joint netted lethality in close combat; and**
 - **Combined and noncombatant survivability in complex terrain.**
 - **To achieve national security objectives over the long haul:**
 - **The suitability of total DOTMLPF solutions (life-cycle ownership) and**
 - **The time to field capabilities must improve.**

Context

- **A Blizzard of Guidance:**

- **Rumsfeld, “Transformation Planning Guidance”, April 2003**
- **Wolfowitz, “Operation of the Defense Acquisition System”, DoD 5000.2, May 2003**
- **Wolfowitz, “Department of Defense Readiness Reporting System”, DoD Directive 7730.65, June 2003**
- **Myers, “Joint Capabilities Integration and Development System”, CJCSI 3170.01C, June 2003**
- **Wolfowitz, “DoD Architecture Framework”, Version 1, coordination draft DoD Instruction 8800.x, March 2003**
- **Daly, Miller, Seglie, and Wauer, “The Test and Evaluation Master Plan, an Operational Overview”, ITEA Journal, September/October 2003.**
- **Hollis and Bolton, “Future Combat Systems and Complementary Systems Coordination”, Department of the Army, November 2003.**

Missions and Means Framework

Purpose: Provide a methodology for explicitly specifying the military mission and quantitatively evaluating the mission utility of alternative warfighting

Doctrine, Organization, Training, Materiel, Leadership, Personnel, and

Facilities (DOTMLPF) services and products.

Objective: Provide a disciplined procedure to explicitly specify the mission, allocate

means, and assess mission accomplishment by:

- Unifying the warfighter, engineer, and comptroller understanding of missions and means.
- Accounting for traditional testing and evaluation factors and traditional warfighter expertise factors that constitute mission success.
- Being sufficiently credible, timely, and affordable to make hard decisions that stay made.
- Being consistent, concise, repeatable, and scalable.
- Providing a disciplined process to implement the Defense